

Supplementary Online Material

Description of field sampling, collection, dissection

Over three days (16-18 Sep 2013), we collected barnacles from 2 habitat types (natural rock and pier piling) at 6 localities spread throughout the Southern California Bight (Fig. 1). At each locality, we collected barnacles from the two habitats to assess possible differences between these habitats because previous research indicates they have different community structures and dynamics (Glasby 1999; Bulleri and Chapman 2004). Localities were chosen for accessibility and availability of both habitat types. To minimize tidal differences and differences in encounter rate, barnacles were collected in a stratified random design from the lower 10 cm of their elevational range. We collected all barnacles encountered in 10 haphazardly placed circular 11.34 cm² cores. Barnacles were frozen immediately and until dissection.

For each barnacle, length was measured as the widest shell base diameter to the nearest 0.25 mm. Barnacles were recorded as infected or uninfected, and as “non-reproductive” or “reproductive,” based on barnacle female reproductive function, where reproductive individuals had ripe ovaries (as indicated by yellow/orange fluid within the ovary), developing eggs, or oviposited eggs. We only included barnacles ≥ 1 mm, avoiding barnacles that are typically pre-reproductive (Hines 1978; Fong, *personal observations*).

Figure S1 (map) Locations of the 12 survey sites, which were at six localities spread throughout the Southern California Bight. Localities included Gaviota (a,b), Goleta (c,d), Santa Barbara (e,f), Ventura (g,h), San Clemente (i,j), and La Jolla (k,l).

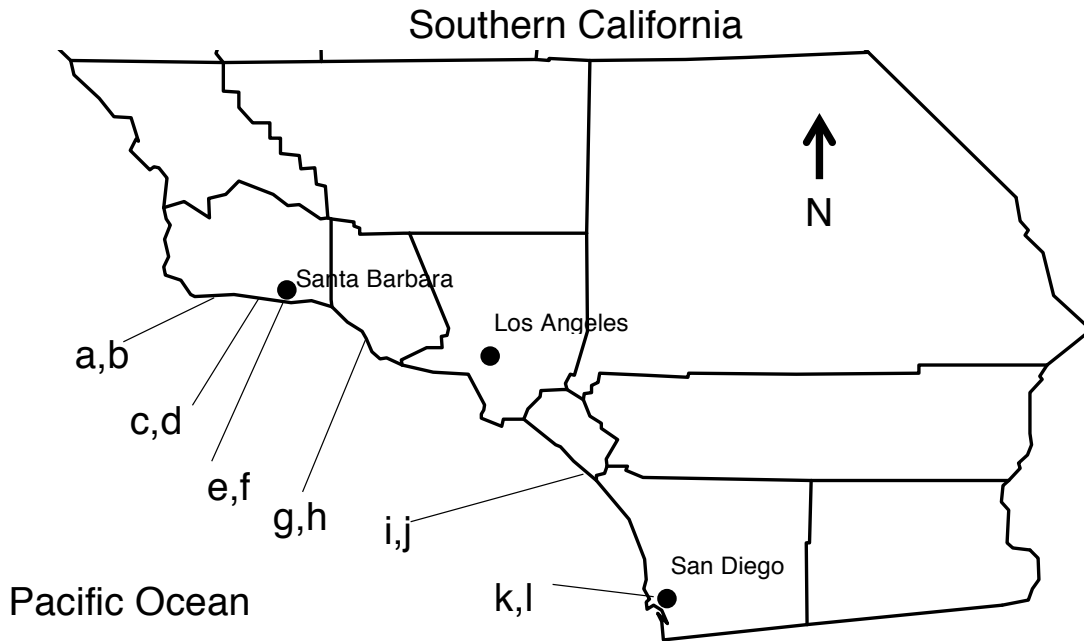


Table S1 Summary of model selection approach

A.) *Basal Diameter and Weight (Whole)*

Model	AICc
Infection, Reproduction, length (all interactions)	-1601.69
Infection, length (all interactions)	-1064.33**
Length	-1580.95

B.) *Basal Diameter and Weight (I and UI)*

Category	Model	AICc
Infected	Linear	106.91107
	Exponential	104.63103**
Uninfected	Linear	193.50042
	Exponential	193.51850

C.) *Basal Diameter and Parasite Weight*

Model	AICc
Linear	-597.4823**
Exponential	-596.8963

D.) *Basal Diameter and Egg Production*

Category	Model	AICc
Parasite	Linear	263.921
	Exponential	261.901**
Barnacle	Linear	384.217**
	Exponential	387.924

E.) *Basal Diameter and Egg Biovolume*

Model	AICc
Length * Egg Type	-158.715
Length	-162.477**

Literature

- Bulleri, F. & Chapman, M.G. (2004). Intertidal assemblages on artificial and natural habitats in marinas on the north-west coast of Italy. *Marine Biology*, **145(2)**, 381-391.
- Glasby, T.M. (1999). Differences between subtidal epibiota on pier pilings and rocky reefs at marinas in Sydney, Australia. *Estuarine, Coastal and Shelf Science*, **48(2)**, 281-290.
- Hines, A.H. (1978). Reproduction in three species of intertidal barnacles from central California. *The Biological Bulletin*, **154(2)**, 262-281